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Testing leather/collagen \_ather test after DIN, EN/ISO, VDA a.o.

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## **Accredited Test Laboratory**

Testing of leather, leatherboards, collagenous materials

Overview test lab / contact

## Tests for single parameters:

## A) physical-mechanical tests and investigations

Thickness

surface coating thickness

bolk density

.

7:

Tensile test (tesile force, elongation to break)

Téar test /resistance

Tearing load/ split tear force

stitch tear resistance

square tensil at tensometer (bulg test), burst

přessure

Finish adhesion

Resistance to flexing (flexometer test)

Color fastness of rubbing (dry, wet, sweat) Sweat fastness / resistance to transpiration

water resistance, Water permeability

(penetrometer)

Water absorption - testing

Water-vapour permeability

Light fastness tests

Fastriess to light

Shrinking behaviour, Climatic-shock resistance

Burning test / fire testing

Full drain (test for corrected grain)

Genuine leather (descriptor)

Microscopy, photography

Water content - measurement / volatile

components

dontent)

pH value - determination

Water souble matter (Washouts)

Chromium oxide content

Pentachiorphenole (PCP)

DIN EN ISO 2589 (DIN 53326\*), IUP 4

**DIN EN ISO 17186** 

DIN EN ISO 2420 (DIN 53327\*), IUP 5

DIN EN ISO 3376 (DIN 53328\*), IUP 6

DIN EN 150 3377-1 (DIN 53329-A\*), TUP 40

DIN EN 1SO 3377-2, IUP B

DIN 53331

DIN 53323

DIN EN ISO 11644, IUF 470

DIN EN ISO 5402, DIN 53351(edition 1983-01),

**JUP 20** 

DIN EN ISO 11640 (DIN 53339\*), JUF 450

DIN EN 150 11641, DIN EN 150 105-E04

DIN EN ISO 5403(DIN 53338\*)

DIN EN 344-1, IUP 10-

DIN EN ISO2417 (DIN 53330\*, Kubelka),

IUP 7, after Freundlich

DIN EN 14268 (DIN 53333\*), IUP 15,

Herfeld-method

DIN EN ISO 105-802 (DIN 54004 \*), IUF402

VDA 75202 (DJN 75202\*), ISO 105-806, PV 1303

TL 52064, PV 1200, DBL 5310, PTL 5002, BMW, PA-N 123 a.o.

DIN 75200/FMVSS 302, DIN EN 1021-1/-2, TL 1010,

DBL 5307, FMV99 302

FILK-QMA-1201

**RAL 060 A2** 

Light microscopy, digital camera, SEM

B) Chemical-analytical tests and investigations

Áshes (total, water-Insoluble)

bichloromethane extract (fat content / grease

Chromium (VI) content

Ázo dyes

DIN 53304, DIN EN 14676 (draft), IUC 5

DIN EN ISO 4047 (Norm DIN 53305"), IUC 7

DIN EN ISO 4048 (DIN 53306\*), IUC 4

DIN EN ISO 4045 (DIN 53312\*), IUC 11

DIN EN ISO 14657 (DIN 53307\*), IUC 6

DIN 53309, IUC 8

DIN CEN/TS14495, DIN 53314, IUC 18

DIN ISO/TS 17234, DIN 53316, IUC 20

DIN ÇEN/TS14494, § 35 LMBG B 82.02-8

Whenen filt froiters dolon/Ah test lahlarnef leder shtml

22.12.2004

PAGE 53/54 \* RCVD AT 1/21/2005 4:07:42 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-1/0 \* DNIS:8729306 \* CSID:4128091054 \* DURATION (mm-ss):13-46

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WASO/TE

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Determination of formaldehyde content

Elatable heavy metals

Cdilagen content

Detection of amide nitrogen

Emissionen, VOC, fagging, adour

Adalytic ( elements, compounds)

(DIN 53313 \*), IUC 25

DIN ISO/TS 17226, (DIN \$3315\*), IUC 19

DIN EN ISO 105-E04 (DIN 54020)

FILK-QMA 2003 / Hydroxyprolin-method

DIN 53308, IUC 10

a. o. VDA 270, VDA 275, VDA 277, VDA 278, DIN EN

ISO 14288

a. o. EDX, XPS / ESCA Quant. element-contents,

FTIR, GC-MS

\*did standards

Tests in accordance with Technical Specifications ("Technische

Lieferbedingungen" - TL):

- Full testing AUDI/VW TL 52064, VW 50103, VW 50104, VW 50180

- Leather testing Opel TM 900400, TM 900600, TM 900700
- Leather testing Opel TM 900400, TM 900600, TM 900700
- Dalmier-Chrysler DBL 5306, DBL 5310
- BMW 8171 302.6, QV \$1033 u.a.
- Porsche PTL 5202, PN 780

- Leather testing to the German Federal Armed Forces' guidelines TL 8330,

among them i. a.:

Shoe upper and lining leather (TL 8330-0001)

Sleek and harness leather (TL 8330-0003)

Glove leather (TL 8330-0006), garment leather (TL 8330-0007) Chrome split leather (TL 8330-0009), water-proof leather (TL 8330-0010) Latchet leather, edging leather (TL 8330-0016), counters (TL 8330-0018)

Harmful matters (TL 8330-0013-A)

More tests and prices on request

Overview test lab / contact

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